

ABEL is an interactive computer program designed to run on IBM-PC compatible computers in the WindowsTM environment. This chapter presents a detailed description of procedures for using the ABEL model to evaluate the financial health of a corporation. For an in-depth description of the model's case screens, see Chapter 3.

Chapter 2 is divided into five sections. Section A describes how the computer program is structured and provides an overview of the choices that ABEL presents during program execution. Section B explains the procedures for starting the program on your own computer. Section C provides data format requirements and additional helpful hints for entering data at your computer workstation. This section also illustrates the error messages ABEL provides if you fail to enter data properly. Section D explains the procedures for ending the program and exporting your results. Section E provides an overview of the options for printing your results.

A. STRUCTURE OF THE PROGRAM

ABEL requests information on the firm's historical financial condition, and, based on this information, evaluates the firm's ability to pay environmental expenditures. ABEL uses three to five years of tax return data to generate a detailed pro forma financial statement and five ratios that provide a general indication of the firm's current financial condition. ABEL also assesses whether the firm will be able to pay for the environmental expenditure that you propose. After you provide ABEL with information on proposed environmental expenditures, the model estimates the probability that the firm can pay for these costs out of internally generated cash flows.

1. Data Requirements

Before you use ABEL, you must obtain three to five years of the firm's federal income tax return information. These returns must be signed and dated and you should try to obtain the most recent available information. To insure against the submission of fraudulent tax returns, it is

advisable to obtain a summary of the firm's tax returns from the IRS. The firm can release the returns to EPA by signing a Form 8821.¹

2. Overview of Computer Program

The model operates in the WindowsTM environment.² Each screen prompts you for specific information and will not allow you to continue until you respond to the prompts. Within each screen you can enter information in any order you wish and make necessary edits. Once you complete each screen, click the "Continue" button at the bottom of the screen to save your inputs and continue with the next step of the program. Alternatively, you can click the "Cancel" button to exit without saving any input or revisions to input that you have made for that particular screen.

To access an explanation of the information required at any point during your use of the model, simply press F1 or click the "Help" button. The help screens provide content-sensitive assistance, including information pertaining both to running the model and understanding and interpreting the model's input and output values.

Once you access the model, the first screen will prompt you for initial information about the user (i.e., you) and where you would like output files stored. The second screen represents the "Main" screen of the model -- here you select a case to examine, begin data entry or data editing, and undertake an analysis. You will be referred back to this screen after you complete a given task, such as data entry or editing.

After you indicate whether the case is existing or new in the second screen, you are then ready to input or edit case information. For a new case, you will be prompted for basic case information (e.g., firm's name, address, number of years of tax information available, year of latest tax return). From the main screen, select the "Input" button to enter the tax return data to complete an analysis. You may then select the "Data Summary" option to verify the information you have input. Then you can run the analysis by selecting the "Run" button. For an existing case, proceed directly to the "Input" button to make any changes to the data before conducting the analysis. You may choose only the data entry screens that you wish to edit. Data input should take about 20 to 30 minutes for each new case.

ABEL displays the results of your calculations on your computer screen and allows you to save your cases for later printing or for further modification. When you are finished, you can choose

¹ A copy of IRS Tax Form 8821 is located in Appendix B of the ABEL 1998 Training Materials.

² If you are not familiar with the WindowsTM computing environment, consult a Microsoft WindowsTM user's guide.

to run the program again or end the program session. If you run the program again, you can change one or more of the data inputs from your previous run. You can then re-calculate the ability to pay analysis without having to re-enter all of your input values. These procedures are described in more detail in Chapter 3.

B. GETTING STARTED

The ABEL Model requires the following minimum equipment to operate:

- PC-compatible 386 computer
- 8 MB of RAM
- Windows™ (Version 3.x) operating system
- Monitor with 640 x 480 or greater resolution
- Mouse (or other pointing device)

If running Windows™ 3.x, the recommended configuration is:

- PC-compatible 486 computer
- 16 MB of RAM
- SVGA monitor with 800 x 600 resolution
- Mouse (or other pointing device)

If running Windows™ 95, the recommended configuration is:

- PC-compatible Pentium level computer
- 32 MB of RAM
- SVGA monitor with 800 x 600 or greater resolution
- Mouse (or other pointing device)

What difference does your PC configuration make when using the ABEL model? The faster your system, the faster the ABEL model will operate. For example, while the model is designed to operate on a PC-compatible 386 computer, you will find that the model requires several minutes to generate results. The time required to generate results on a Pentium-level computer, in contrast, is approximately 30 seconds. The remainder of this section describes how to install the ABEL model on your hard drive using diskettes.³

³ABEL 1998 has been tested on many different operating systems. The standard font used during the development process was Times New Roman, 12 point. If you experience difficulty reading the text on your screen or the text printed on the model output, please seek help from your regional computer support staff. Your support staff may be able to solve the problem by modifying your video driver, monitor setup, printer driver, or printer setup.

1. Installing to a PC from Floppy Disks

If you have access to the five floppy disks containing the PC version of the ABEL model, you can load the program onto your hard drive. First, insert Disk 1 into a floppy drive (probably drive a:\ or b:\).

- If you are running WindowsTM 3.x or WindowsTM NT 3.5x, you should then enter the Program Manager. If you have any other applications running within WindowsTM (e.g., word processing software, clock, e-mail), close them. Within the Program Manager screen, go up to the Menu bar, click "File," then click "Run." In the command line of the Run dialogue box, enter "a:\setup.exe" (or "b:\setup.exe" if the floppy is in the b:\ drive). Then click "OK." If you receive a warning message that you cannot copy a file because it is in use, simply click "OK." It is merely notifying you that the file the installation system is trying to copy already exists on your computer and is currently open.
- If you are running WindowsTM 95 or WindowsTM NT 4.0, go to the Tool Bar and click the "Start" button. Choose "Run" from the Start Menu (usually located in the lower left-hand corner of your screen). In the command line of the Run dialogue box, enter "a:\setup.exe" (or "b:\setup.exe" if the floppy is in the b:\ drive). Then click "OK." If you receive a warning message that you cannot copy a file because it is in use, simply click "OK." It is merely notifying you that the file the installation system is trying to copy already exists on your computer and is currently open.

The first ABEL setup screen will appear as shown in Exhibit 2-1. This screen reminds you to close any other software packages open on your computer. If you need to exit the ABEL installation to close some software, select "Cancel." If you select "Cancel" at any time during the installation process you will receive a message telling you that installation is not complete. This option allows you to install the program later. If all of your software is closed and you wish to proceed with installation, press "Next."

Exhibit 2-1

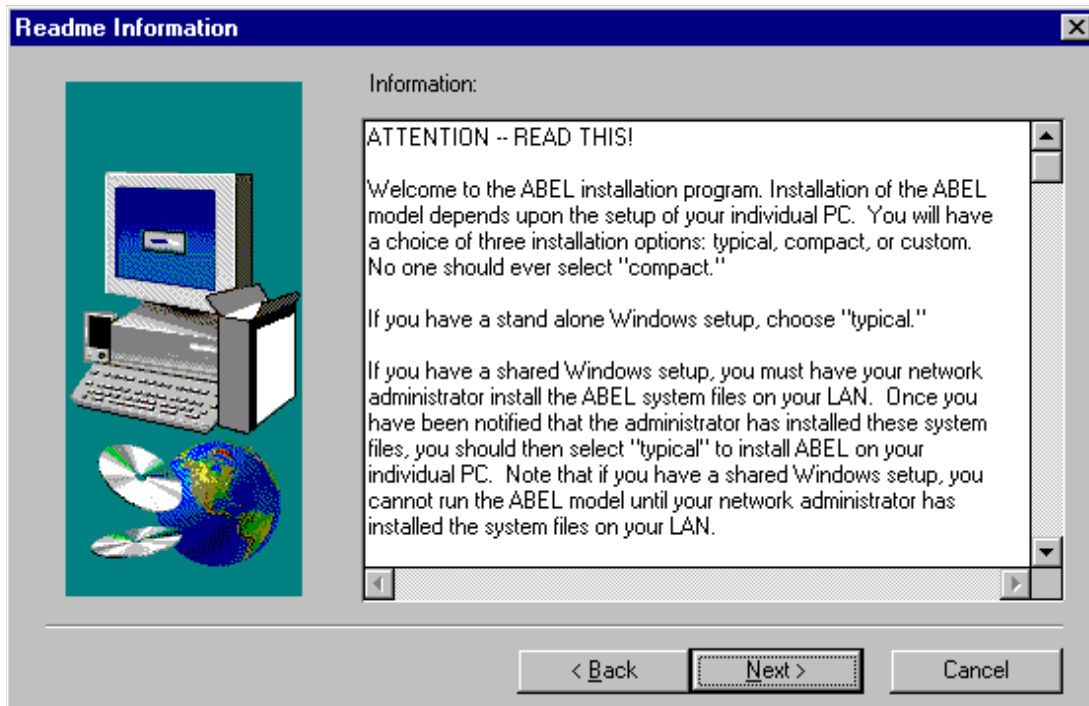
"ABEL INSTALLATION - FIRST SCREEN"



After selecting "Next" the second setup screen will appear as shown in Exhibit 2-2. Before beginning you will be asked to read a short explanation about the three installation options provided by the ABEL model. **PLEASE READ THIS SCREEN BEFORE PROCEEDING WITH INSTALLATION!** ABEL requires several different installation options because computer systems (i.e., local area networks or LANs) in EPA regional offices and state agencies can be configured differently, affecting the installation process. In most regions, you will have all of your system files located on your individual PC. If this is the case, you should choose "typical" as your installation option. Alternatively, in other regions, your system files may be located on your regional LAN. In this case, you cannot overwrite the system files during the installation process as required for the ABEL model to load. You should install the "typical" option to your computer *only after* your computer support staff install the system files on your LAN. You should contact your computer support staff to determine which Windows setup is used in your region. For more information, please see the instructions illustrated in *italics* below.

Exhibit 2-2

"ABEL INSTALLATION - SECOND SCREEN"



Installation of the ABEL model depends upon the setup of your individual PC. You will have a choice of three installation options: typical, compact, or custom. No one should ever select "compact." If you have a stand alone Windows setup, choose "typical." If you have a shared Windows setup, you must have your network administrator install the ABEL system files on your LAN. Once you have been notified that the administrator has installed these system files, you should then select "typical" to install ABEL on your individual PC. Note that if you have a shared Windows setup, you cannot run the ABEL model until your network administrator has installed the system files on your LAN. Individual users should not select the "custom" option.

If you do not know the type of Windows setup that is installed on your individual PC, please seek help from your network administrator.

If you are a network administrator, select the "custom" installation option. You will then be given a choice to install program files, system files, or all files. If your network setup is shared, you MUST install the system files to the LAN to enable your users to run ABEL. Verify the file dates and versions against the list provided in the Administrators' Instructions and notify users that they may proceed with the installation. You may also choose to install the program files on the LAN to allow for easier distribution of the model. If you install the program files to the LAN, please make sure that your users have full access to the directory in which ABEL is stored.

If you have any questions about the installation of the ABEL model, please call EPA's Economic Support Helpline at 888/ECONSPT.

After you finish reading the installation instructions, please press "Next." The third setup screen will appear as shown in Exhibit 2-3. You will also be asked to designate a directory in which to store the model. The default directory is "C:\ABEL" (assuming that your local hard drive is c:\). If you wish to save the model to a different directory, select the browse key and click on the appropriate directory as shown in Exhibit 2-4. If the directory in which you wish to store the model does not exist, place the cursor on the path line and type a name for the new directory (e.g., c:\NEWABEL in Exhibit 2-4). ABEL will automatically create the directory for you. It is extremely important that you not enter a root directory (e.g., c:\ or f:\) here; you must specify a subdirectory (e.g., c:\abel). **Note that you should not store ABEL 1998 to the same directory in which the DOS version of the ABEL model is stored. Please verify that the DOS version of the ABEL model is not stored in the "C:\ABEL" directory before proceeding.** For example, if the DOS version of the model is stored in "C:\ABEL," you may wish to save ABEL 1998 to a directory titled "C:\NEWABEL." If you wish to return to the previous screen, press "Back." If you wish to exit the installation program, press "Cancel."

Exhibit 2-3

"ABEL INSTALLATION - THIRD SCREEN"

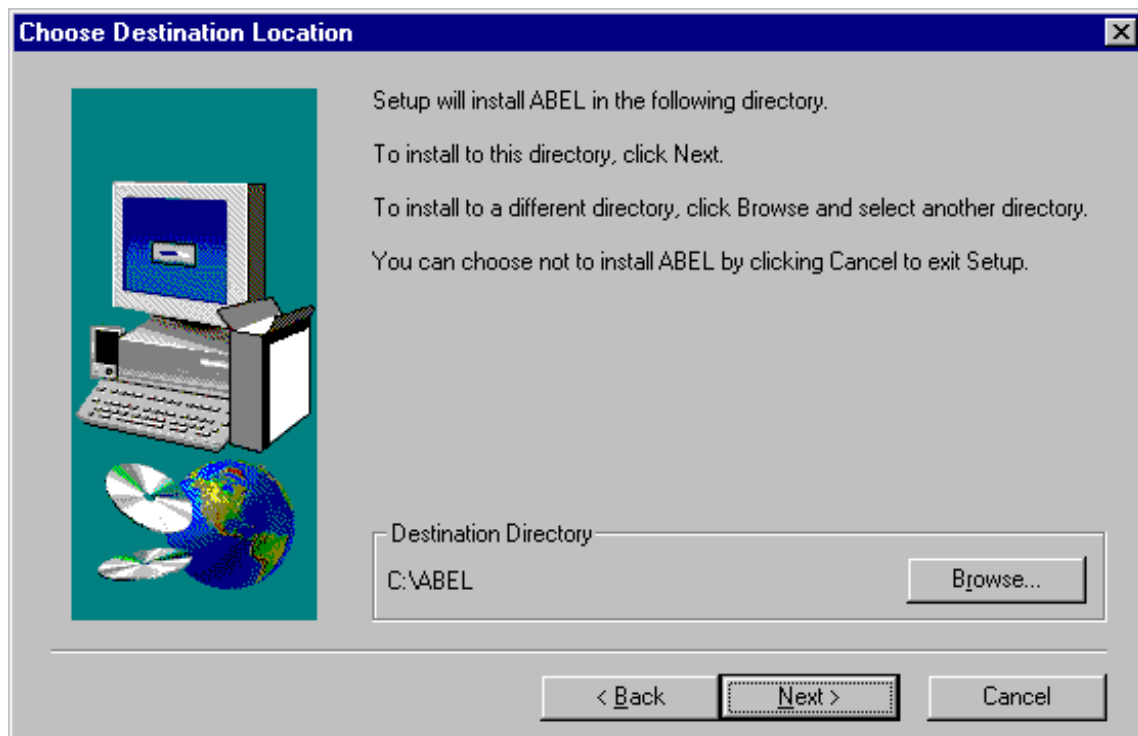
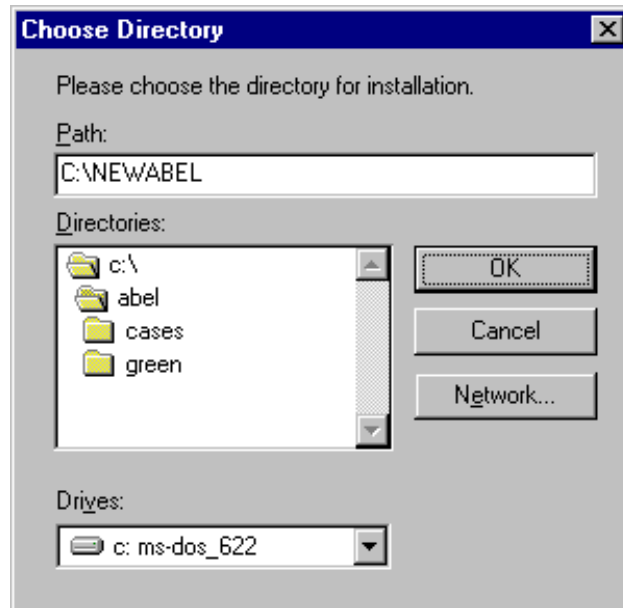


Exhibit 2-4

"ABEL INSTALLATION - FOURTH SCREEN"

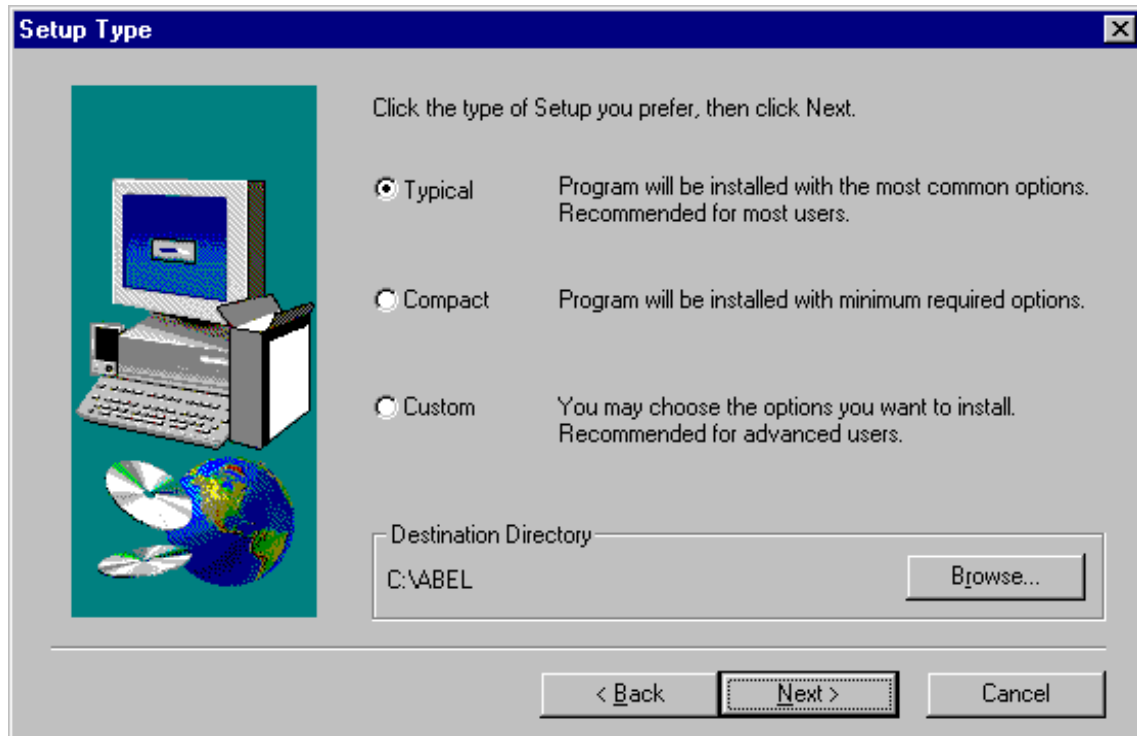


After selecting "Next" on the third setup screen, the next setup screen will appear as shown in Exhibit 2-5. On this screen, you will be asked to specify a setup option. You should make your decision using the text outlined on the second installation screen, as well as assistance from your computer support staff. You can also change the directory in which you wish to store the model on this screen by selecting "Browse."

Note that you also have the option of returning to the previous screen by selecting "Back" or to exit the installation program entirely by selecting "Cancel."

Exhibit 2-5

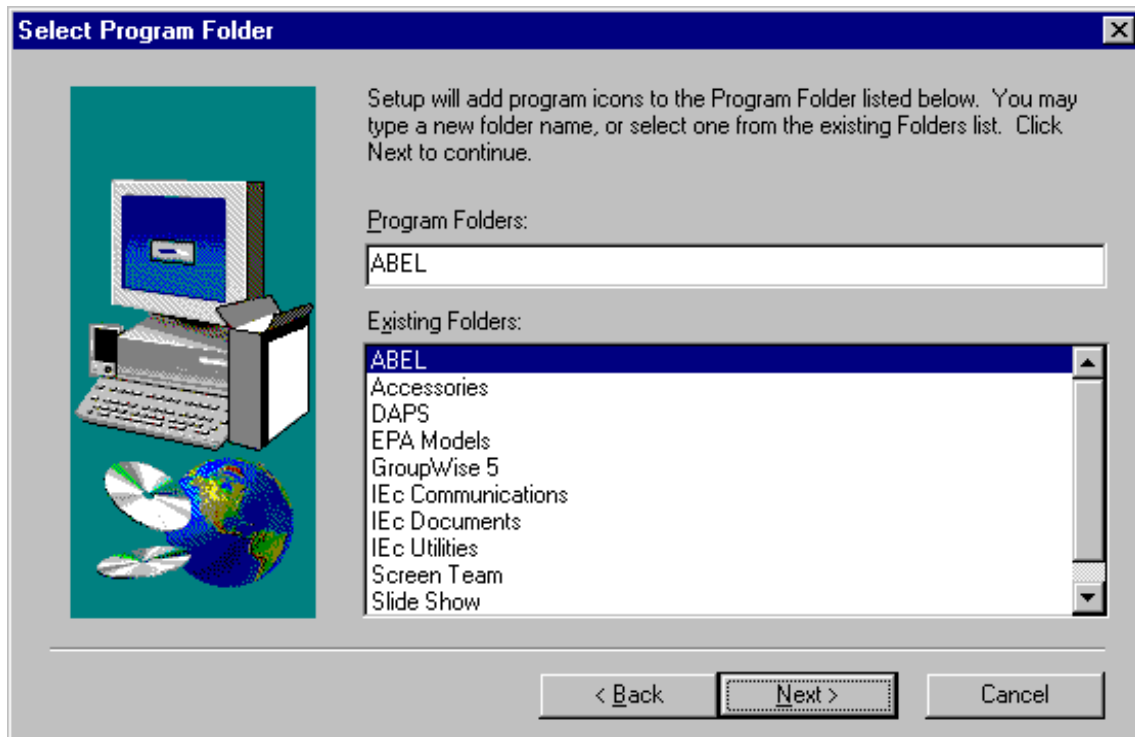
"ABEL INSTALLATION - FIFTH SCREEN"



After selecting "Next" on the fifth setup screen (i.e., Exhibit 2-5), the sixth setup screen will appear, as shown in Exhibit 2-6. This screen allows you to designate the Program Folder (or Program Group if you are running Windows™ 3.x) in which you would like the ABEL 1998 icon to reside. The default folder that the model creates for you is ABEL. You may also choose to install the icon to an alternative Folder (or Group) such as EPA models. After selecting the appropriate Folder (or Group), press "Next."

Exhibit 2-6

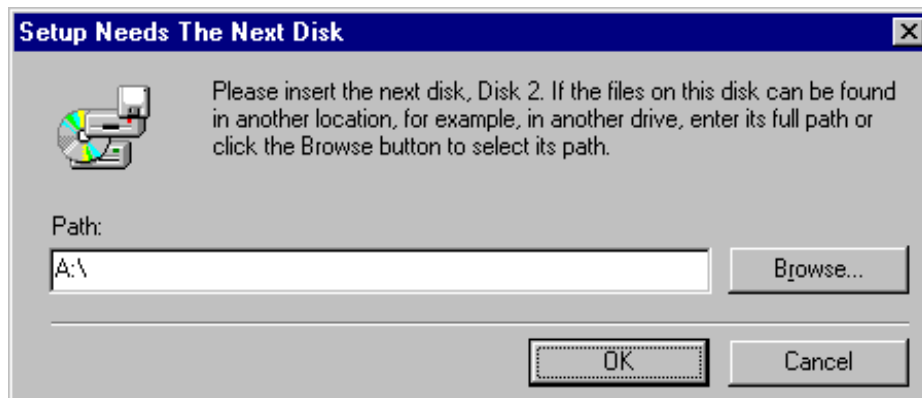
"ABEL INSTALLATION - SIXTH SCREEN"



After selecting "Next" on the sixth setup screen, you will be asked to insert Disks 2 through 5 successively, as shown in Exhibit 2-7. The "path" displays the location of the ABEL 1998 installation disk and *not the directory in which your model will be stored*. For example, in this case the installation disks are located in the a:\ drive.

Exhibit 2-7

"ABEL INSTALLATION - SEVENTH SCREEN"



The program will give you a completion notice after all of the ABEL files have been copied to your hard drive. The eighth setup screen will then appear as shown in Exhibit 2-8. On this screen you will be asked whether you wish to reboot your computer. To ensure proper installation of the model you should select "Yes" and press "Finish."

Exhibit 2-8

"ABEL INSTALLATION - EIGHTH SCREEN"



Once ABEL has been loaded onto your hard drive, simply double-click the model icon to start the program. After installing the model, you may wish to create a subdirectory for storage of your case files. You may also choose to store your case files in a pre-existing directory as ABEL case files will not alter any other files stored in that directory (e.g, WordPerfect files, Excel spreadsheets). *Note that you must save your case files in a directory that is different from the directory in which the model is stored.* For example, if the model is stored in "c:\abel," you may wish to create a directory titled "c:\abel\cases" for storage of your case files.

C. MODEL ATTRIBUTES

The following sections illustrate the key attributes of the model, including the general features common to every screen displayed in the model, format of data entries, the help system, how to correct entry errors, and error messages generated by the model. Note that a complete description of each screen is provided in Chapter 3.

1. General Features of the Model Screens

You must enter certain basic information before the program will allow you to proceed to the next window. You can move directly to each input item using your mouse or tab key. If you click the "Continue" button located at the bottom of the screen before entering required information, the cursor will return to the first line of missing information to prompt your entry. At any time you can use your mouse or tab key to move around the screen and edit an entry that you have already made.

2. Format of the Data Entries

ABEL is very flexible regarding the format of data entries that it will accept, unlike some non-WindowsTM models that require specific entry formats (e.g., in some programs numerical values cannot be entered with commas, dollar signs, or percent signs). For example, the input screen of the model requires the user to input the "gross receipts or sales less returns and allowances" from the firm's federal tax form. Suppose that this figure is \$1,285,600. The user can enter that figure as "1285600," "1285600.00," or "1,285,600." The model will record any of these inputs as \$1,285,600. The same is true for all other inputs.

Be careful to use only the number keys to enter numerical values. A common mistake is typing the lowercase letter **L** instead of a number 1. Another error occurs when the capital letter **O** is typed instead of the number 0 (zero). The model cannot adjust for figures that are input with a mix of numbers, letters, and characters other than commas, decimal points, and negative signs. For that reason, do not include a dollar sign (\$) in any entries. Negative dollar amounts should be entered with a minus sign before the amount, rather than parentheses around the amount; e.g., "-45600" rather than "(45600)."

3. Help System

As noted previously, the user can easily access the help system by either pressing the F1 key or clicking the "Help" button. The help feature allows the user to obtain assistance in both running the model and understanding the model's output. When you have entered a help screen, you will see either the help topic and a brief explanation (if there is only one help topic for that screen) or a listing of the various help topics available. From such a list you may click directly on the name of any

particular topic to bring up a secondary help screen which will explain that topic. In some cases the help explanations may parallel explanations in this manual, or may refer you to this manual for further assistance.

4. Correcting Typing Errors

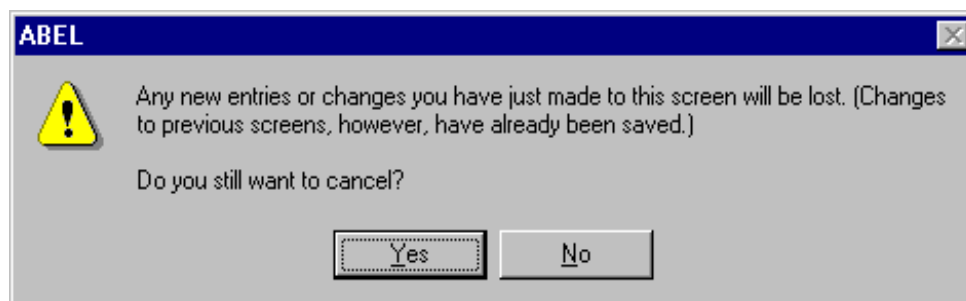
After typing your entry, you might discover that you have typed an incorrect letter or number. If you have not yet clicked the "Continue" button at the base of the window, correcting the mistake is straightforward. Simply click the entry containing the error and correct it. For example, if you typed 100,234 and want to delete one of the zeros, you would simply click the relevant input box and correct the figure (i.e., 10,234).

It is extremely important for you to *verify* your data inputs so that the computer conducts the analysis using the correct information. You may do so by examining them on the screen as well as comparing the written input summary with the firm's tax forms. Most people find that they can perform a better audit by checking the written summary than they can by checking the input window on the computer screen. For that reason, the model includes a data summary in its printout. To generate this summary, select the "Data Summary" button located at the bottom of the "Main" screen and click the "Print" button at the base of each data summary screen produced.

If your inspection of the data inputs reveals that you have made an error, exit back to the "Main" screen, then work your way to the data input screen containing the error to correct it.

5. Error Messages

The model will notify you if you have made an error that prevents the model from conducting an analysis. These errors generally include the lack of input information integral to the model's calculations. In such cases, the model will prompt you to return to the missing or inaccurately entered data before continuing with the ability to pay analysis. The model will also double-check that you want to erase any changes made to the screen when you click "Cancel" to exit a screen, so that you do not accidentally lose revisions. In such cases, the model will issue a warning like the following:



By canceling to exit a screen, you will only lose changes made to that particular screen; you will not lose edits to any previous screens.

D. ENDING PROCEDURES

A key feature of the ABEL Model is the ability to save your interim data inputs and analysis as you work through a case. Each time you enter data into a particular screen and click the "Continue" button, the model will automatically save your data inputs. This attribute is particularly convenient if you are interrupted during use of the model. If you have saved your data input, you can exit the program and when you return, all of the information will be stored in a case file displayed on the "Main" screen. Similarly, you can also find any interim results that you have saved in the case file.

If, after entering data into a particular screen, you do not wish to run the analysis with that data, you can click the "Cancel" button rather than clicking "Continue." The computer will ask you to verify that you wish to erase the inputs or changes to input which you have just entered on that screen. If you click "OK," you will exit the screen and any inputs that you just entered will be deleted; the screen will return to its previous status. Any inputs made to other screens will not be erased, however. If you realize only after clicking "Continue" that you do not wish to run the analysis with data from a screen, you must re-enter the screen and change the data, then click "Continue" to save the changes.

After completing a case, you may wish to "export" your results to another user or directory. All of your case files are stored together within the model in a single file called "ABELCASE.MDB" located in the directory specified as your output directory in the first screen of the model (see Chapter 3, Exhibit 3-1). You may transfer these files by clicking the "Export" button on the "Main" screen. In the subscreen, denoted "Select Cases for Export," choose the case or cases you wish to export by single-clicking each case name. If you wish to export all the cases you may click the "Select All" button above the case name list. Then, select the directory or subdirectory into which you want your case files transferred by clicking it. You may also create a new subdirectory for your cases by clicking the box titled "Create New Subdirectory" and typing in the name of your choice. A new subdirectory with that name will appear under the directory currently selected in the "Destination Directory" box. Finally, click the "Export" button. The model will issue a prompt asking if you wish to continue to export; click "Yes." A message will come up notifying you of the successful exporting of your files. *Note that this procedure will replace any existing ABEL cases which may previously have been in the destination directory with the exported files.*⁴

⁴ Alternatively, you can export cases using the File Manager application in Windows™. Copy the "ABELCASE.MDB" file, which contains all of your existing cases, to another directory in order to transfer information about any particular case to that directory. Again, note that any cases which were previously in the receiving directory will be erased through this procedure.

E. PRINTING OPTIONS

ABEL allows you to print a summary of your data inputs and the results of your analysis. To print a data input summary, simply click the "Print" button located at the bottom of the associated screen. If you wish to print the results of the analysis, click "Run" on the "Main" screen. The "Reports in Generation" screen will appear. Select the reports you wish to print and designate "Printer" as your destination. Then click "Generate." You may generate the same reports to your computer screen by selecting "Screen" as your destination and clicking "Generate." Finally, pressing the printer button on the upper left hand corner of the Financial Profile and Ability to Pay Analysis reports will print your results.